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Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the matter of )  
 )  
Amendment of Parts 15 and 90 )  
of the Commission's Rules to )  
Provide Additional Frequencies )  
for Cordless Telephones )

ET Docket No. 93-235  
RM-8094

COMMENTS OF  
UNIDEN AMERICA CORPORATION

1. Uniden America Corporation (hereinafter "Uniden") respectfully submits its comments to the above captioned Notice of Proposed Rule Making ("NPRM"). This proposed rule would add 15 new channels to the existing 10 channel cordless telephone service operating in the 46/49 MHz band. The new channels, in the 44/49 MHz band, will be shared with the Private Land Mobile Radio Service ("PLMRS") operating under Part 90 of the Commission's rules.

INTRODUCTION

2. Along with its parent corporation and affiliate companies, Uniden manufactures and markets a broad line of communications equipment, including cordless telephones operating under Part 15, as well as land mobile radio

249

equipment operating under Part 90 of the Commission's Rules. Therefore, Uniden believes itself to be uniquely qualified to comment in this proceeding since both Parts 15 and 90 are affected by the proposals of this proceeding.

3. Uniden fully supports all of the proposals detailed in the NPRM. Further, we support the FCC's rationale that points out that, although there are other frequencies available for wireless technologies, "there will continue to be a demand for the current low-priced 46/49 MHz cordless telephone technology for the foreseeable future". Uniden believes that, if approved, the expanded cordless telephone channels will provide the consumer with a better grade of service by decreasing the probability of interference due to the overcrowding of the current channels.

4. From the vantage point of the land mobile industry, cordless telephones will be an excellent "sharing partner" due, in great part, to the fact that the radio frequency energy generated by cordless telephones is limited to about 25 to 30 microwatts. This is in comparison to the typical 25 to 50 watt mobile and 300 watt base station transmitters used in the PLMRS currently assigned to these frequencies. With the proviso "that cordless telephones using the proposed frequencies must employ a mechanism to avoid causing interference to the PLMRS", Uniden believes that cordless

telephone operation will be virtually "transparent" to the land mobile user.

5. A possible concern has been raised by the television industry in that the frequencies proposed for cordless telephones are closer to the intermediate frequency commonly used in television receivers. Although Uniden does not perceive this to be a significant problem, we support the Commission's proposed mandate "to designate the lower frequencies at 44 MHz for base units in order to minimize potential interference to TV broadcasting". Accordingly, we believe that simple instructions to the cordless telephone user as to the placement of the base unit should alleviate this concern, altogether.

#### DISCUSSION

6. In the NPRM, the Commission invited "comments on the proposed frequencies and whether alternative frequencies would be more suitable". Uniden believes that the frequencies listed in the NPRM are the best available today for the expansion of the 46/49 MHz cordless telephone service operating under Part 15.233. These proposed frequencies were selected on the basis of the limited number of licensees and units currently assigned to these frequencies. Uniden

participated in a monitoring program which verified that such usage is either non-existent or very sparse in most parts of the country.

7. Comments were "invited as to whether and to what extent the proposed 44 MHz frequencies pose a significantly greater interference risk to the reception of TV broadcasting than the 46 MHz frequencies already used by cordless telephones". As stated before, Uniden does not believe this to be a problem. Uniden's opinion was reached from informal field testing; however, language could be included within the instructions supplied with the cordless telephones advising the user to relocate the base unit away from any television receiver if interference is detected.

8. The Commission invited comment "as to whether there is a need for more specific requirements to protect against interference to the PLMRS". Uniden believes that additional requirements are not necessary given the frequency loading characteristics, the nature of the services using the same frequencies, and in particular, the "flea power" of cordless telephones. The real interference issue is in the reverse direction. PLMRS transmitters will probably cause interference to cordless telephones unless there is some feature within the cordless telephone that finds an "open channel" to avoid the high power PLMRS radios. The design

requirements, mandated in the NPRM for the proposed cordless telephones, will surely alleviate this concern.

9. The Commission asked for "information as to the cost of implementing [the] requirement" that protects the PLMRS user against interference from the proposed cordless telephones operating on the new shared frequencies. Uniden believes the cost increase, by comparison to current "full-featured" models, will be minimal. This is because many cordless telephones in use today employ multiple channels with automatic frequency selection in order to select clear channels. This technology is very similar to that which is mandated in the NPRM.

10. In the NPRM, the Commission invited comment concerning information that might be required with an application for equipment authorization to show compliance to the proposed requirement that protects the PLMRS from interference caused by the subject cordless telephones. Uniden believes that a simple exhibit statement, filed with the application for equipment authorization, which explains the mechanism used in that particular device, would suffice. To go beyond this requirement would most likely expand the scope of equipment authorization criteria to include such measurements as receiver performance, threshold requirements for transmitter inhibiting circuitry, and the like. As previously mentioned,

it is unlikely that cordless telephones will interfere with the PLMRS. The real concern is the avoidance of co-channel interference with other cordless telephones because that possibility is much greater. The marketplace will force the prudent cordless telephone designer to consider this in order to stay in the business of manufacturing and marketing these devices.

11. The Commission made reference to the "channel offset" rule that allowed manufacturers to place multiple signals within the 20 kHz bandwidth. Although Uniden is a proponent of narrowband technology in its commercial land mobile radio business, we remain committed to the belief that low cost cordless telephone service cannot accommodate this feature without causing a significant amount of interference to itself. For this reason, Uniden supports abolishing the "channel offset" rules for the existing, as well as the proposed cordless telephones.

12. The Commission invited comment on "future low-cost spectrum-efficient cordless telephones that may seek to use the existing and proposed frequencies". With the continuing evolution of advanced technologies, Uniden believes that eventually some of the cost-prohibitive techniques and devices could be adapted for low-cost consumer cordless telephones. However, we believe the proposed rules must be

written with the objective of providing clear regulations governing the development of low-cost cordless telephones now. As new technologies become suitable for use in low-cost cordless telephones, then this matter could be revisited to include these advanced technologies.

13. The NPRM invited comment "as to whether 20 kHz is the appropriate bandwidth for the new frequencies". Uniden supports 20 kHz as the appropriate bandwidth for the new and existing frequencies.

#### CONCLUSION

14. Uniden fully supports the proposed addition of the 30 new frequencies for cordless telephones as well as the provisions contained in the NPRM. We encourage the Commission to move quickly to approve these new rules by issuing a Report and Order as soon as possible.

Respectfully submitted,



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